

REMARKS

The present application relates to hybrid maize plant and seed 38A24. Claims 1-32 are currently pending in the present application. Claims 11, 15, 19, 24, 28, and 32 have been amended. Applicant respectfully requests consideration in light of the following remarks.

REJECTIONS MAINTAINED UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 1-9, 10(amended), 11-13, 14(amended), 15-17, 18(amended), 19-22, 23(amended), 24-26, 27(amended), 28-30, 31(amended), and 32 remain stand rejected under 35 U.S.C. § 112 first paragraph for the use of the hybrid designation 38A24 which the Examiner says must be made publicly available through deposit.

As applicant stated earlier, under 37 CFR 1.801-1.809, applicant wishes to refrain from deposit of hybrid 38A24 until allowable subject matter is indicated. The Examiner indicates that as no subject matter is as yet allowable the rejection stands. Upon indication of allowable subject matter claims will be amended as necessary to include the accession number as suggested by the Examiner.

REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 1-9, 10(amended), 11-13, 14(amended), 15-17, 18(amended), 19-22, 23(amended), 24-26, 27(amended), 28-30, 31(amended), and 32 remain rejected under 35 U.S.C. § 112 second paragraph for the recitation of "ATCC accession No. ____" in claims 1, 5, and 7. The Examiner notes that the recitation "Hybrid maize seed designated 38A24" in claims 1, 5, and 7, render the claims and those dependent thereon indefinite. The Examiner concludes that amending the claims to recite the ATCC deposit number would overcome the rejection. Applicants will refrain from amending the claim until the time of the actual deposit as set forth in 37 CFR 1.801-1.809.

Claims 11, 15, 19, 24, 28, and 32 remain rejected for reasons of record under item 4 of the previous office action. Applicant notes that this paragraph in the previous action related to claims 12-15 and claim 25-28 applicant assumes that it is paragraph 5 that the

Examiner wishes to indicate here. These claims stand rejected as being indefinite due to the phrases “wherein at least one ancestor” is the instant maize plant and “expressing a combination of at least two 38A24 traits” from a Markush group of traits such as “exceptional yield”, or “above average dry down” which the Examiner states are indefinite as there is not limitation on the degree of relatedness and as there is no standard for how to measure the traits listed in the Markush group.

Each of these claims have been amended to further define and describe Applicant’s invention. Each of these claims now defines the derived plant in terms of a reference plant (that of 38A24) and a statistical standard of measurement, stating that is trait is “not significantly different than” 38A24 at 5% significance when grown in the same environmental conditions. This provides a reference plant as well as a statistical measure by which the trait can be compared. It is submitted that this amendment should alleviate the Examiner’s concerns.

Issues Under 35 U.S.C. § 102/103

Claims 11, 15, 19, 24, 28, and 32, remain rejected under 35U.S.C. 102(b) as anticipated by or, in the alternative, as obvious under 35 U.S.C . 103(a) over Luedtke, Jr. for reasons of record. The Examiner notes that these claims are still taught by Luedtke, Jr. as cultivar 38A24 has at least two of the characteristics of the 38A24 plant listed in those claims. The Examiner concludes that the process of making the claimed plants does not distinguish the plants themselves from those taught by the reference, concluding that the invention was clearly “prima facie” obvious as a whole to one of ordinary skill in the art, if not anticipated by Luedtke, Jr..

Applicant respectfully traverses and requests reconsideration of claims 11, 15, 19, 24, 28, and 32 as amended herein. When looking at maize plants it would be possible to find many traits that are similar between varieties such as the disease resistance or growth habit. However, to say that there are similarities in phenotype between two varieties is not the same as saying that the two varieties had the same morphological and physiological characteristics as a whole, or that one is an obvious variant of the other. Further, similarity in phenotype does not mean that the two varieties will perform similarly, in identical environmental

conditions or more particularly, in a breeding program. The claims as amended recite a specific reference variety and a specific statistical test which may be performed to determine whether in fact the traits observed are actually the “same”.

Any phenotypic trait that is expressed in the claimed plants is a result of a combination of all of the genetic material present in the 38A24 plant, and 38A24 will have its own unique genetic profile that it will contribute to a breeding program. This unique genetic background will result in the claimed plant and this profile and its combination with other plants will result in a unique combined genetic profile that is the product claimed.

A plant with the combination of two of these traits is also not rendered anticipated or obvious from Luedtke, Jr. It would require undue experimentation to begin with the hybrid of 38A24 which has its own unique combination of traits to breed with it to recover a hybrid with at least two of the traits enumerated in claims 11, 15, 19, 24, 28, and 32. Further, there is no expectation of success that the crossing of the hybrid 38A24 with some yet to be identified plant would yield a plant with two of the traits enumerated in the claim. Each generation would bring a random combination of traits and there is no expectation that the claimed combination could be achieved at all. Without any teaching about dominance, or heritability of such traits it cannot be said that there is an expectation of success that the combination of plants would achieve the combination enumerated in the claim, to say nothing of issues such as inbreeding depression etc. The laborious process of breeding to generate a hybrid is disclosed in the specification and to assume that another hybrid can be bred to generate the same grouping of traits when is speculation at best.

It is impermissible to use hindsight reconstruction and the benefit of applicants disclosure to cherry pick among pieces which are present in the art, there must be some suggestion to make the combination and an expectation of success. In re Vaeck 20 U.S.P.Q.2d 1434 (Fed. Cir. 1991). As discussed above, 38A24 is clearly differentiated from 38A24. Further, plants derived from 38A24 are also clearly differentiated. It must be recognized that the 38A24-derived plants are themselves unusual and a nonobvious result of a combination of previously unknown and nonobvious genetics. In addition to the phenotypic traits described herein, each 38A24-derived plant has an additional benefit unique

to each specific cross using 38A24 as one of its ancestors. Thus, they deserve to be considered new and nonobvious compositions in their own right as products of crossing when 38A24 is used as a starting material.

CONCLUSION

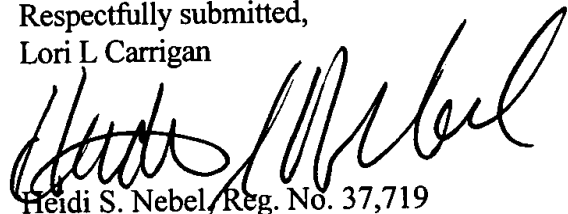
Applicant submits that, in light of the foregoing amendments and remarks, the claims, as amended, are in condition for allowance. The Examiner is invited to contact the undersigned at the number listed if this amendment does not result in allowable subject matter. Reconsideration and early notice of allowability are respectfully requested.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Reconsideration and allowance is respectfully requested.

Respectfully submitted,
Lori L Carrigan



Heidi S. Nebel, Reg. No. 37,719

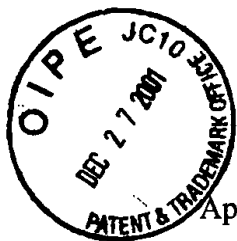
ZARLEY, McKEE, THOMTE, VOORHEES
& SEASE

801 Grand Avenue, Suite 3200
Des Moines, Iowa 50309-2721
Phone No. (515) 288-3667
Fax No. (515) 288-1338

CUSTOMER NO: 27142

Attorneys of Record

-pw-



Application No. 09/489,223

**AMENDMENT — VERSION WITH MARKINGS
TO SHOW CHANGES MADE**

In the Claims

Claims 11, 15, 19, 24, 28, and 32 have been amended as follows:

11. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 2, said maize plant capable of expressing a combination of at least two [38A24] traits which are not significantly different from 38A24 when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a relative maturity of approximately 96 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [exceptional] yield, [above average] dry down, [above average] late season plant health, [consistent] yield performance under seasonal drought and high temperature stress, [above average] early season growth, [above average] test weight, [above average] grain quality, [solid] resistance to Northern Leaf Blight, [solid] resistance to Goss's Wilt, [solid] resistance to Stewart's Wilt, [excellent] resistance to head smut, silage with superior readily available energy and whole plant digestibility, and [particularly] suited to the Northwest, Northcentral, Northeast, Western and Drylands regions of the United States, Canada, and Western Europe.

15. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 12, said maize plant capable of expressing a combination of at least two [38A24] traits which are not significantly different from 38A24 when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a relative maturity of approximately 96 based on the

Comparative Relative Maturity Rating System for harvest moisture of grain, [exceptional] yield, [above average] dry down, [above average] late season plant health, [consistent] yield performance under seasonal drought and high temperature stress, [above average] early season growth, [above average] test weight, [above average] grain quality, [solid] resistance to Northern Leaf Blight, [solid] resistance to Goss's Wilt, [solid] resistance to Stewart's Wilt, [excellent] resistance to head smut, silage with superior readily available energy and whole plant digestibility, and [particularly] suited to the Northwest, Northcentral, Northeast, Western and Drylands regions of the United States, Canada, and Western Europe.

19. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 16, said maize plant capable of expressing a combination of at least two [38A24) traits which are not significantly different from 38A24 when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a relative maturity of approximately 96 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [exceptional] yield, [above average] dry down, [above average] late season plant health, [consistent] yield performance under seasonal drought and high temperature stress, [above average] early season growth, [above average] test weight, [above average] grain quality, [solid] resistance to Northern Leaf Blight, [solid] resistance to Goss's Wilt, [solid] resistance to Stewart's Wilt, [excellent] resistance to head smut, silage with superior readily available energy and whole plant digestibility, and [particularly] suited to the Northwest, Northcentral, Northeast, Western and Drylands regions of the United States, Canada, and Western Europe.

24. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 20, said maize plant capable of expressing a combination of at least two [38A24] traits which are not significantly different from 38A24 when determined at a 5% significance level and when grown in the same environmental conditions, said

selected from the group consisting of: a relative maturity of approximately 96 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [exceptional] yield, [above average] dry down, [above average] late season plant health, [consistent] yield performance under seasonal drought and high temperature stress, [above average] early season growth, [above average] test weight, [above average] grain quality, [solid] resistance to Northern Leaf Blight, [solid] resistance to Goss's Wilt, [solid] resistance to Stewart's Wilt, [excellent] resistance to head smut, silage with superior readily available energy and whole plant digestibility, and [particularly] suited to the Northwest, Northcentral, Northeast, Western and Drylands regions of the United States, Canada, and Western Europe.

28. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 25, said maize plant capable of expressing a combination of at least two [38A24] traits which are not significantly different from 38A24 when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a relative maturity of approximately 96 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [exceptional] yield, [above average] dry down, [above average] late season plant health, [consistent] yield performance under seasonal drought and high temperature stress, [above average] early season growth, [above average] test weight, [above average] grain quality, [solid] resistance to Northern Leaf Blight, [solid] resistance to Goss's Wilt, [solid] resistance to Stewart's Wilt, [excellent] resistance to head smut, silage with superior readily available energy and whole plant digestibility, and [particularly] suited to the Northwest, Northcentral, Northeast, Western and Drylands regions of the United States, Canada, and Western Europe.

32. (Amended)

A maize plant, or its parts, wherein at least one ancestor of said maize plant is the maize plant, or its parts, of claim 29, said maize plant capable of expressing a combination of at least two [38A24] traits which are not significantly different from 38A24 when determined

at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a relative maturity of approximately 96 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [exceptional] yield, [above average] dry down, [above average] late season plant health, [consistent] yield performance under seasonal drought and high temperature stress, [above average] early season growth, [above average] test weight, [above average] grain quality, [solid] resistance to Northern Leaf Blight, [solid] resistance to Goss's Wilt, [solid] resistance to Stewart's Wilt, [excellent] resistance to head smut, silage with superior readily available energy and whole plant digestibility, and [particularly] suited to the Northwest, Northcentral, Northeast, Western and Drylands regions of the United States, Canada, and Western Europe.